

$$\begin{aligned} & \left( \frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}, \frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}, \frac{1}{\sqrt{2}} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, \frac{1}{\sqrt{2}} \begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix} \right), \\ & \left( \frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}, \frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}, \frac{1}{\sqrt{2}} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}, \frac{1}{\sqrt{2}} \begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix} \right) \end{aligned}$$

- [c1] 1. An extracorporeal blood processing information management system comprising:
- a central database;
  - a data input device connected in data communication relationship with said central database;
  - a data manipulation device connected in data communication relationship with at least one of said central database and said data input device; and
  - a communication subsystem connected in data communication relationship with at least one of said central database, said data input device and said data manipulation device; and
- at least one extracorporeal blood processing machine;
- whereby said communication subsystem is connected in data communication relationship with said at least one extracorporeal blood processing machine to provide for data communication to and from said at least one extracorporeal blood processing machine;
- whereby data is communicated by said communication subsystem, said data comprising preparation data and run data;
- whereby said communication subsystem communicates preparation data to said at least one extracorporeal blood processing machine, said preparation data being generated by said data manipulation device and used by said at least one extracorporeal blood processing machine in preparation of said at least one machine for an extracorporeal blood processing procedure; and
- whereby said communication subsystem communicates run data from said at least one extracorporeal blood processing machine, whereby said run data represents information about an extracorporeal blood processing procedure run on said at least one blood processing machine.
- [c2] 2. An extracorporeal blood processing information management system according to claim 1 whereby said preparation data is derived from stored database data communicated from said central database to said data manipulation device.
- [c3] 3. An extracorporeal blood processing information management system

according to claim 1 whereby said preparation data is derived from input data communicated from said data input device to said data manipulation device.

- [c4] 4. An extracorporeal blood processing information management system according to claim 1 in which said run data is communicated by said communication subsystem from said at least one extracorporeal blood processing machine during said procedure.
- [c5] 5. An extracorporeal blood processing information management system according to Claim 1 in which said run data is communicated to said at least one extracorporeal blood processing machine and is used by said at least one extracorporeal blood processing machine in preparation of said at least one extracorporeal blood processing machine for a discrete, subsequent extracorporeal blood processing procedure.
- [c6] 6. An extracorporeal blood processing information management system according to Claim 1 in which said run data is communicated by said communication subsystem to said central database to create stored run data.
- [c7] 7. An extracorporeal blood processing information management system according to Claim 6 in which said stored run data is communicated by said communication subsystem to said data manipulation device which manipulates said stored run data to create preparation data which is communicated to at least one extracorporeal blood processing machine which uses said preparation data in preparation of said at least one machine for a discrete, subsequent extracorporeal blood processing procedure.
- [c8] 8. An extracorporeal blood processing information management system according to claim 6 in which said stored run data includes blood component loss data.
- [c9] 9. An extracorporeal blood processing information management system according to claim 6 in which said stored run data includes donation interval data.
- [c10] 10. An extracorporeal blood processing information management system



a module for assigning a donor to an extracorporeal blood processing system;  
and  
a module for finalizing an extracorporeal blood procedure.

- [c18] 18. An extracorporeal blood processing information management system according to Claim 17 in which said module for collecting donor data includes one or more sub-procedures which prompt a user to enter data.
- [c19] 19. An extracorporeal blood processing information management system according to Claim 17 in which said module for collecting donor data includes one or more sub-procedures which provide for receiving donor data stored in a discrete storage medium.
- [c20] 20. An extracorporeal blood processing information management system according to Claim 17 in which the data may be collected at the extracorporeal blood processing system.
- [c21] 21. An extracorporeal blood processing information management system according to Claim 17 in which the data may be collected through use of a barcode reader.
- [c22] 22. A system according to claim 17 where said module for manipulating donor data includes one or more facilities which provide for optimizing donor data to create optimized donor data.
- [c23] 23. A system according to claim 17 where said module for manipulating donor data includes one or more facilities which provide for manipulating said optimized donor data to create manipulated donor data.
- [c24] 24. A system according to claim 17 where said module for collecting data and said module for manipulating data are used to obtain a prediction of a procedure for which a donor is qualified to undergo recruiting a donor to undergo the procedure.
- [c25] 25. A system according to claim 17 where said module for assigning a donor to an extracorporeal blood processing system includes one or more facilities which provide for determining the availability of a donor to be assigned to an

extracorporeal blood processing system.

[c26] 26. A system according to claim 17 where said module for assigning a donor to an extracorporeal blood processing system includes one or more facilities which provide for determining the availability of an extracorporeal blood processing system to which a donor may be assigned.

[c27] 27. A system according to claim 17 where said module for finalizing an extracorporeal blood procedure includes one or more facilities which provide for monitoring a procedure.

[c28] 28. A system according to claim 17 where said module for finalizing an extracorporeal blood procedure includes one or more facilities which provide for finalizing a procedure.

[c29] 29. A system according to claim 17 where said module for finalizing an extracorporeal blood procedure includes one or more facilities which provide for generating a report on a procedure.

[c30] 30. A system according to claim 17 which further comprises a module for monitoring a procedure.

[c31] 31. A system for performing an extracorporeal blood collection procedure according to claim 17 which further comprises a reporting module for generating reports.

[c32] 32. A system for performing an extracorporeal blood collection procedure according to claim 17 which further comprises an administration module for administrating parameters to be used in at least one of said module for collecting donor data; said module for manipulating said donor data; said module for assigning a donor to an extracorporeal blood processing system; and said module for finalizing an extracorporeal blood procedure.

[c33] 33. An extracorporeal system according to claim 1 in which said communication subsystem is wireless.

[c34] 34. An extracorporeal system according to claim 1 in which the communication

subsystem includes orbital satellite communications equipment.

- [c35] 35. A method for data entry into a blood processing machine, comprising the steps of:  
scanning barcode data into the blood processing machine via a barcode reader connected to the blood processing machine in data communication relationship therewith;  
assigning the scanned barcode data to a particular blood processing category relative to a particular blood processing procedure; and  
using the assigned scanned barcode data in the management of at least one blood processing procedure.
- [c36] 36. A method, as claimed in Claim 35, in which the barcode data represents biological data relating to a source of whole blood.
- [c37] 37. A method, as claimed in Claim 35, in which the barcode data represents supply data relating to a supply for use in an blood processing procedure.
- [c38] 38. A method, as claimed in Claim 35, in which the barcode data becomes stored data in the central database, such stored data being useful in generating a report.
- [c39] 39. A method, as claimed in Claim 35, in which the barcode data becomes stored data in the central database, such stored data being useful in preparing for a subsequent procedure.
- [c40] 40. An extracorporeal blood processing information management system comprising:  
a central database;  
a barcode data input device connected in data communication relationship with said central database;  
a data manipulation device connected in data communication relationship with at least one of said central database and said data input device; and  
a communication subsystem connected in data communication relationship with at least one of said central database, said data input device and said data manipulation device; and

at least one extracorporeal blood processing machine;  
 whereby said communication subsystem is connected in data communication relationship with said at least one extracorporeal blood processing machine to provide for data communication to and from said at least one extracorporeal blood processing machine;  
 whereby data is communicated by said communication subsystem, said data comprising barcode data and run data;  
 whereby said communication subsystem communicates barcode data to said at least one extracorporeal blood processing machine, said barcode data being input by said barcode data input device; and  
 whereby said communication subsystem communicates barcode and run data from said at least one extracorporeal blood processing machine, whereby said run data represents information about an extracorporeal blood processing procedure run on said at least one blood processing machine.

- [c41] 41. A system as claimed in Claim 40 in which the barcode data input device is connected to an extracorporeal blood processing machine.
- [c42] 42. A system as claimed in Claim 40 in which the blood processing machine includes a user interface which provides for assigning the barcode data to a category.
- [c43] 43. A method, as claimed in Claim 40, in which the barcode data represents biological data relating to a source of whole blood.
- [c44] 44. A method, as claimed in Claim 40, in which the barcode data represents supply data relating to a supply for use in an blood processing procedure.
- [c45] 45. A method, as claimed in Claim 40, in which the barcode data becomes stored data in the central database, such stored data being useful in generating a report.